

Grade 7 Academic Standards

Unit 1 Lesson

Science

Standard 1 The Nature and Science of Technology

Technology and Science

- 7.1.8 Explain that technologies often have drawbacks as well as benefits. Consider a technology, such as the use of pesticides, which helps some organisms but may hurt others, either deliberately or inadvertently.
- 7.1.10 Identify ways that technology has strongly influenced the course of history and continues to do so.

Standard 3 The Physical Setting

Matter and Energy

- 7.3.11 Explain that the sun loses energy by emitting light. Note that only a tiny fraction of that light reaches the Earth. Understand that the sun's energy arrives as light with a wide range of wavelengths, consisting of visible light, infrared, and ultraviolet radiation.
- 7.3.16 Recognize and explain that different ways of obtaining, transforming, and distributing energy have different environmental consequences.

Standard 4 The Living Environment

Human Identity

- 7.4.14 Explain that the environment may contain dangerous levels of substances that are harmful to human beings. Understand, therefore, that the good health of individuals requires monitoring the soil, air, and water as well as taking steps to keep them safe.

Unit 1 - Activities 4,5,6 and 7 satisfy the following Indiana academic standards:

Science

- 7.1.2 Explain that what people expect to observe often affects what they actually do observe and provide an example of a solution to this problem.
- 7.1.4 Describe that different explanations can be given for the same evidence, and it is not always possible to tell which one is correct without further inquiry.
- 7.1.8 Explain that technologies often have drawbacks as well as benefits. Consider a technology, such as the use of pesticides, which helps some organisms but may hurt others, either deliberately or inadvertently.
- 7.3.16 Recognize and explain that different ways of obtaining, transforming, and distributing energy have different environmental consequences.
- 7.4.14 Explain that the environment may contain dangerous levels of substances that are harmful to human beings. Understand, therefore, that the good health of individuals requires monitoring the soil, air, and water as well as taking steps to keep them safe.
- 7.7.2 Use different models to represent the same thing, noting that the kind of model and its complexity should depend on its purpose.

Social Studies

- 7.5.4 Examine the impact of cultural change brought about by technological inventions and innovations in the past and present.